

CLAIMS

1. A method for the treatment of organs subject to erosion, comprising the application of a cobalt-based alloy on the surface of said organ to form a layer of anti-erosion coating, characterized in that said alloy comprises:

chromium	28-32% by weight
tungsten	6-8% by weight
silicon	0.1-2% by weight
carbon	1.2-1.7% by weight
nickel	3-6% by weight
molybdenum	1-3% by weight
cobalt	the complement to 100% by weight.

2. The method according to claim 1, characterized in that said composition also comprises from 0.01 to 1% by weight of iron and/or from 0.01 to 1% by weight of manganese.

3. The method according to claim 1 or 2, characterized in that said organs comprise the components of a vapour turbine.

4. The method according to claim 3, characterized in that said components are vapour turbine blades.

5. The method according to any of the claims 1-4, char-

acterized in that the application is effected by means of laser plating.

6. The method according to claim 5, characterized in that said laser is a CO₂ laser or a YAG laser.

7. The method according to any of the claims 1-6, characterized in that the layer of coating applied has a thickness ranging from 0.1 to 5 mm.

8. The method according to any of the claims 1-7, characterized in that it also comprises a preliminary heating phase of the component to be treated.

9. The method according to any of the claims 1-8, characterized in that it comprises a series of application passages of said alloy.

10. A cobalt-based alloy for the coating of organs subject to erosion by liquids, characterized in that it comprises:

chromium	28-32% by weight
tungsten	6-8% by weight
silicon	0.1-2% by weight
carbon	1.2-1.7% by weight
nickel	3-6% by weight
molybdenum	1-3% by weight
cobalt	the complement to 100% by weight.

11. The alloy according to claim 10, characterized in that it also comprises from 0.01 to 1% by weight of iron

and/or from 0.01 to 1% by weight of manganese.

12. The alloy according to claims 10 or 11, characterized in that it has the following composition:

Cr	28%
W	6.1%
Si	0.2%
C	1.3%
Ni	3.2%
Fe	0.01%
Mn	0.01%
Mo	1.1%
Co	Balance

13. The alloy according to claims 10 or 11, characterized in that it has the following composition:

Cr	31.5%
W	7.5%
Si	1.8%
C	1.6%
Ni	5.8%
Fe	0.9%
Mn	0.8%
Mo	2.9%
Co	Balance

14. The alloy according to claims 10 or 11, characterized in that it has the following composition:

Cr	30%
W	7%
Si	1%
C	1.5%
Ni	4.5%
Fe	0.5%
Mn	0.3%
Mo	2%
Co	Balance

15. The alloy according to claims 10 or 11, characterized in that it has the following composition:

Cr	30%
W	7%
Si	1%
C	1.5%
Ni	4.5%
Fe	<0.3%
Mn	<0.3%
Co	53.4%
Mo	1.8%
Other	0.25%

16. An organ or end-product subject to erosion by liquids, characterized in that it comprises a surface coating to prevent erosion from liquids comprising an alloy coating according to any of claims 10-15.

17. The organ or end-product according to claim 16, characterized in that it is a component of a vapour turbine.

18. The organ or end-product according to claim 17, characterized in that said component is a blade of a gas turbine.

19. The organ according to any of the claims 16-18, characterized in that said anti-erosion surface lining

72NP6105/134626 ,

has a thickness ranging from 0.1 to 5 mm.